

Amendment

Please amend the Application as follows.

In the Claims

For the convenience of the Examiner, all of the claims are reproduced below regardless of whether amended or not.

SUB (31)

1. (Amended) A video inspection system comprising:  
a first image sensor operable to acquire an image in a first direction along a first axis;  
a second image sensor operable to acquire an image in a second direction essentially perpendicular to the first direction; and[,]  
a camera board and processor coupled to the first image sensor and the second image sensor, the camera board and processor operable to receive an image from either the first image sensor or the second image sensor and prepare the image for display.

2. (Amended) The video inspection system of Claim 1, wherein the second image sensor is an array of image sensors operable to simultaneously acquire an image 360 degrees around the first axis [in the second direction].

3. (Amended) The video inspection system of Claim 1, wherein the [camera is] first image sensor, the second image sensor, and the camera board and processor are mounted in a

water tight, pressure sealed camera assembly for use in a bore hole or water well.

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cnc'd 4. (Amended) The video inspection system of Claim 1, wherein the [camera is] first image sensor, the second image sensor, and the camera board and processor are mounted in a sealed camera assembly for use in a pipeline and the first axis is parallel to the long axis of the pipeline.

5. The video inspection system of Claim 3, wherein the camera assembly transmits images to a monitor via coaxial cable, the monitor operable to receive the output of the camera board and processor.

a2 6. (Amended) The video inspection system of Claim 5, wherein the coaxial cable includes a quick disconnect to allow easy removal and installation of other camera assemblies [and other] or tools.

7. The video inspection system of claim 5, wherein the coaxial cable is stored on a spool in a transportable case.

SUB (22) a3  
cont 8. (Amended) The video inspection system of Claim 5, wherein the coaxial cable passes over a cable arm encoder operable to determine the depth of the camera and display it on the monitor [from] with the output of the camera board and processor.

9. (Amended) The video inspection system of Claim 1, wherein the [camera is] first image sensor, the second image sensor, and the camera board and processor are mounted in a camera assembly operable to rotate about the first axis when the second image sensor is acquiring an image.

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cont

10. (Amended) The video inspection system of Claim 1, wherein the first image sensor and the second image [sensors] sensor are a single image sensor, the single image sensor mounted in a rotatable housing, the single image sensor operable to acquire an image in a first direction along [a] the first axis when the rotatable housing is in a first setting, the single image sensor operable to acquire an image zero to ninety degrees offset from the first direction due to a rotation of the rotatable housing, the first axis parallel to the long axis of the object being inspected.

11. (Amended) The video inspection system of Claim 10, wherein the rotatable (housing is operable to rotate around the first axis, the single image sensor operable to acquire an image as the rotatable housing rotates around the first axis.

12. (Amended) The video inspection system of Claim 10, wherein the [camera is] first image sensor, the second image sensor, and the camera board and processor are mounted in a water tight, [pressure] pressure sealed camera assembly for use in a bore hole or water well.

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concl'd

13. (Amended) The video inspection system of Claim 10, wherein the [camera is] first image sensor, the second image sensor, and the camera board and processor are mounted in a sealed camera assembly for use in a pipeline [and the first axis is parallel to the long axis of the pipeline].

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14. The video inspection system of Claim 12, wherein the camera assembly is attached to a monitor via coaxial cable, the monitor operable to receive the output of the camera board and processor.

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15. (Amended) The video inspection system of Claim 14, wherein the coaxial cable includes a quick disconnect to allow easy removal and installation of other camera assemblies [and other] or tools.

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16. The video inspection system of claim 14, wherein the coaxial cable is stored on a spool in a transportable case.

17. The video inspection system of Claim 14, wherein the coaxial cable passes over a cable arm encoder operable to determine the depth of the camera and display it on the monitor with the output of the camera board and processor.

SUB (33)

18. (Amended) A video inspection system comprising:  
an image sensor in a housing, the image sensor  
operable to capture an image in a first direction parallel to [a  
first axis] the direction of travel of the housing, the image  
sensor further operable to capture an image in a second  
direction, the second direction approximately perpendicular to  
the first [directions] direction; and[,]

a camera board and processor coupled to the image  
sensor and operable to process the image and prepare it for  
display.

19. (Amended) The video inspection system of Claim 18,  
wherein the housing is rotatable and operable to rotate from [a]  
the first direction to [a] the second direction and operable to  
rotate around the first axis [when in the second direction], the  
image sensor operable to capture an image when in a first  
position, a second position and any position in between.

20. (Amended) The video inspection system of Claim 18,  
wherein the image sensor comprises one image sensor operable to  
capture an image in the first direction and a second image  
sensor operable to capture an image in [a] the second direction.

21. The video inspection system of Claim 20, wherein the  
housing is operable to rotate about the first axis such that the  
second image sensor can capture an image as the housing rotates.

22. The video inspection system of Claim 20, wherein the second image sensor is further comprised of a series of image sensors spaced about the housing and operable to capture an image about the first axis without rotating the housing.

a6 23. (Amended) The video inspection system of Claim 18, wherein the image sensor is mounted in a water tight, [presure] pressure sealed camera assembly for use in a bore hole or water well.

24. The video inspection system of Claim 18, wherein the image sensor is mounted in a sealed camera assembly for use in a pipeline and the first axis is parallel to the long axis of the pipeline.

a7 25. (Amended) The video inspection system of Claim [24] 18, wherein the image sensor is mounted in a sealed camera assembly and the camera assembly is attached to a monitor via coaxial cable, the monitor operable to receive the output of the camera board and processor.

26. (Amended) The video inspection system of Claim 25, wherein the coaxial cable includes a quick disconnect to allow easy removal and installation of other camera assemblies [and other] or tools.

27. The video inspection system of claim 25, wherein the coaxial cable is stored on a spool in a transportable case.

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as 28. (Amended) The video inspection system of Claim 25, wherein the coaxial cable passes over a cable arm encoder operable to determine the [depth of] distance that the camera has traveled and display it on the monitor with the output of the camera board and processor.

29. A system for video inspection of a passage comprising:  
a carrying case having a deep housing and a removable  
cover;

a spool adapted for storing coaxial cable inside the  
carrying case, the coaxial cable exiting the carrying case at an  
opening;

a cable arm supported by an adjustable leg, the cable  
arm attached to the carrying case, the cable arm operable to  
have the coaxial cable pass over it; and,

a camera assembly, coupled to the coaxial cable,  
having a single camera operable to capture an image in a first  
direction along a long axis and capture an image in a second  
direction, the second direction ninety degrees offset from the  
first direction.

30. The system of Claim 29, wherein the carrying case  
further includes a monitor operable to display the image  
captured by the single camera.

31. The system of Claim 29, wherein the coaxial cable  
includes a quick disconnect near the camera assembly.

32 The system of Claim 29, further including a cable arm  
encoder operable to measure the length of cable to determine the  
distance the camera assembly has traveled.



33. (Amended) A video inspection system comprising:  
a camera assembly including:  
an upper section having a camera card; [and]  
a stepper motor coupled to the end of the upper  
section; and  
a lower section[,] coupled to the upper section and  
the stepper motor, the lower section operable to rotate about an  
axis when the stepper motor is operational, the lower section  
further comprising[;]:  
an upper part having a high torque dc motor; and  
a lower part coupled to the upper part by a  
pivoting means, the pivoting means driven by the high torque  
motor and operable to pivot the lower part from a down view to a  
side view[;], the lower part further comprising an image sensor  
coupled to the camera card and operable to acquire an image in a  
down position and a side position and any position in between,  
the image sensor further operable to acquire an image as the  
lower section rotates about an axis.